

51ST ANNUAL REPORT

FOR THE FISCAL YEAR JULY 1, 1980, TO JUNE 30, 1981

FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES

DOYLE CONNER, COMMISSIONER OF AGRICULTURE

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Letter of Transmittal

The Honorable Robert Graham
Governor of Florida
Tallahassee, Florida 32301

Dear Governor:

To fulfill statutory requirements, it is my pleasure to submit to you and members of the state legislature the 51st annual report of the Florida Department of Agriculture and Consumer Services.

This report lists and points out the services and programs provided by the department for the fiscal year from July 1, 1980, to June 30, 1981. The information contained in this report will reflect the increased importance of the changes in agriculture and consumer needs in our state.

Not only has Florida agriculture continued to grow, but the public has become increasingly aware of activities in the area of consumer service.

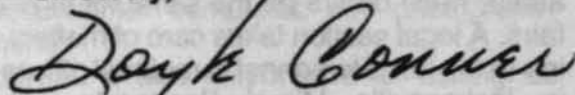
There have been significant advances in every division within our department. But to conserve paper and other costs, this report will highlight only a few of the major priorities during the year.

I wish to express my appreciation to all department employees for their dedication and spirit. By like token we are grateful for the assistance and cooperation which we received from every segment of related industries and from all levels of state government.

We offer this report for your consideration and information.

With warm personal regards, I am

Sincerely,



Doyle Conner
Commissioner



Doyle E. Conner became Florida's seventh Commissioner of Agriculture in January, 1961. Prior to his election to this office, Conner served 10 years in the state legislature and was the youngest member ever to be elected Speaker of the House. Conner was born in Starke, Fla., on December 17, 1928, and was graduated from the University of Florida with a bachelor's degree in agriculture. He is a past president of the University of Florida Alumni Association, National Association of State Departments of Agriculture and Southern United States Trade Association. In early 1976 Conner was named one of 76 "Florida Patriots" by the Florida Bicentennial Commission.

Harold H. Hoffman became assistant commissioner of agriculture in April, 1965. He joined the department in 1940 as a chemist in the Division of Chemistry's feed laboratory, was named laboratory chief in 1948 and associate state chemist in 1959. Born on March 29, 1914, in Jefferson County, Nebraska, Hoffman attended elementary and secondary schools in Winter Haven, Florida. He was graduated from the University of Florida in 1938 with a bachelor's degree in chemistry.



Staff, Advisory Bodies and Support Groups

The commissioner of agriculture receives additional support from several areas. There are staff assigned to do research and coordinate cabinet affairs while others do the same for legislative affairs. A legal section takes care of matters pertaining to the law. Personnel in regional offices located in Jacksonville, Miami, Pensacola and Tampa perform department-related duties in those cities. Additionally, more than a dozen advisory councils provide the commissioner with input in their areas of concern.

DIVISION OF ADMINISTRATION

John S. Shipp was appointed director of the Division of Administration on November 1, 1975. Prior to this he had been employed by the state treasurer's office and the Department of Education as well as having served for six years in the Florida House during the late 1950s. Shipp holds a bachelor's degree from the University of Florida as well as a master's degree from Florida State University. He was born in Williamson, Georgia, on March 17, 1918, and served both in the army and navy during World War II. In addition to his service with the state, Shipp also has experience as a school teacher/administrator and as a publishing company executive.



Bureau of General Services

The Bureau of General Services is responsible for departmental purchasing, maintenance, grounds, duplicating and printing, mail distribution, supplies, communications and coordinating all records management with Board of Archives and Records Management. Work involves the development of procedures necessary to carry out these responsibilities.

Bureau of Information, Education and Research Services

The Bureau of Information, Education and Research Services is responsible for providing the general public with information regarding those areas that come under department jurisdiction. In fulfilling that responsibility, the bureau processed 28,700 information inquiries during the fiscal year. In addition, 33,000 pieces of literature were distributed.

Utilizing the cooperation of the various media, the bureau prepared 250 news stories for distribution. Broadcast items produced numbered 735 and kept the statewide agricultural radio network supplied with accurate and timely agricultural information.

A total of 100 speeches and manuscripts were also prepared by bureau information specialists. A staff photographer completed 260 photography assignments.

The bureau is also responsible for editing the annual report and an employee newsletter.

Bureau of Personnel Management and Employee Relations

The primary function of the Bureau of Personnel Management and Employee Relations is to assist

the department in recruiting and maintaining the best possible employees to carry out its various programs in compliance with the State Personnel Rules and Regulations; the personnel related laws in Chapter 110, Florida Statutes; collective bargaining contracts; and the state and federal guidelines on equal employment opportunity and veterans' preference. In conjunction with this function, the bureau administers the state uniform pay plan; the benefits program which includes insurance, retirement benefits, workers' compensation benefits and the leave program; and maintains the official personnel records. Training and orientation programs for all employees, counseling and assistance to supervisors with employee problems, review and revision of classification of positions to assure proper relationships with duties and pay are all continual operations of the bureau.

The bureau also serves as a liaison with the Department of Administration and the Florida Legislature on Personnel related matters. In this capacity members of this office are serving on various committees and/or in an advisory capacity concerning proposed legislation, rules and the statewide Human Resource Management Study which is expected to result in a revised classification, pay and evaluation system.

Bureau of Public Fairs and Expositions

The Bureau of Public Fairs and Expositions is responsible for issuing all fair permits and tax exemption certificates for fairs chartered under Chapter 616 Florida Statutes.

It is the duty of this bureau to inspect all midway companies operating at chartered fairs for operational safety, electrical safety and fire prevention requirements.

This bureau coordinates all departmental exhibits and displays at county, regional and state fairs, agricultural expositions, agricultural mall

promotions and at state and national livestock events held in Florida.

The Bureau administers the State Matching Funds program, which aids county fairs and livestock shows in capital improvements to their facilities. It also distributes the Commissioner of Agriculture Premium and Awards Revolving Fund. These monies go to the 46 Florida fairs and to many scholarships and judging teams of 4-H Clubs, Future Farmers of America, Future Homemakers of America and Florida's universities involved in agricultural programs.

Bureau of Management Systems

The Bureau of Management Systems is responsible for providing technical systems assistance to all divisions of the department, as well as providing a centralized data processing service.

The operating objective of the Management Systems staff is the coordinating and development of management information and control systems to reduce operating time and lower costs to assist management operations.

The major areas of responsibility within the Management Systems staff are administrative policies and procedures as related to data processing, systems design for all divisions, special management improvement studies and systems research, and overall coordination of the department's EDP services requirements.

During this year's legislative session the Agriculture Management Information Center of the Department of General Services was transferred to the Department of Agriculture and Consumer Services. Effective July 1, 1981 the equipment and personnel will become an integral part of the department. The functions of the Agriculture Management Information Center and the Bureau of Management Systems will be combined into one entity. The results of this action will provide a timely, accurate, and cost effective data processing service to all the offices of the department.

Bureau of Accounting and Budgeting

The Bureau of Accounting and Budgeting is responsible for all accounting functions of the department's revenues and expenditures, which totaled \$91,197,121 and \$84,465,833 respectively in 1980-81. Other functions include property management, federal grant-in-aid activity, planning and budgeting.

The bureau continues to use the department accounting system which is a statewide double entry system developed by the office of the Auditor

DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES 1980-81 Revenues and Expenditures

	AMOUNT	% OF TOTAL
Revenues:		
Appropriations	\$51,145,273	56.1%
Charges for Current Services	24,071,032	26.4
Licenses and Permits	488,598	0.5
Use of Money and Property	7,437,146	8.2
Other Agencies	8,048,823	8.8
Refunds	6,249	.0
Total Revenues	\$91,197,121	100.0%
Expenditures:		
Salaries and Benefits	\$52,340,520	62.0%
Salary Incentive	35,028	.1
Other Personal Services	1,068,160	1.3
Expenses	14,308,949	16.9
Operating Capital Outlay	2,183,614	2.6
Refunds	100,254	.1
Transfers to Administrative Trust Fund	2,427,151	2.9
Transfer to Market Improvement Working Capital Trust Fund	268,727	.3
Transfer to Capital Projects Fund	341,143	.4
Transfers to State-Relations Trust Fund	7,830	.0
Other Transfers	18,965	.0
Payment of Debt Service	328,756	.4
Data Processing	1,104,823	1.3
Certifications Forward	1,541,473	1.8
Grants and Aids	1,384,401	1.6
Payments to USDA	77,899	.1
Citrus Blackfly	417,952	.5
General Revenue Service Charge	272,055	.3
Automated Testing Equipment	1,051,850	1.3
Research	68,257	.1
Soil and Water Conservation	541,191	.6
Apiary Indemnities	20,230	.0
Livestock Indemnities	959,460	1.1
Fixed Capital Outlay	3,597,145	4.3
Total Expenditures	\$84,465,833	100.0%

General. It is a computer-based system whereby accounting and budgeting personnel enter all data into the records by use of on-line data entry computer terminals which are physically located within the

bureau. In addition, Mapper Report Processing System has been installed within the bureau which is ideally designed to handle the intense mix inherent in the real-time execution of report processing functions.

The bureau continues to work closely with appropriate committees to enhance the systems for use in day-to-day management purposes.

The Auditor General and State Comptroller working with the Agencies User Committee, are in the process of redesigning the Statewide Accounting System to provide for required sub-systems and management flexibility for all users including the Auditor General, Legislative, and Executive Branch. When completed, this should enable all phases of State Government to manage their financial affairs on an accurate and timely basis.

Soil and Water Conservation Office

The Soil and Water Conservation Office, located in Gainesville, is charged with providing administrative, promotional, program and legislative support to the 61 Soil and Water Conservation Districts in Florida. The Soil and Water Conservation Office also coordinates the activities of the Soil and Water Conservation Council, a nine-member body appointed by the commissioner of agriculture.

The Accelerated Soil Survey Program funded partially by the state provides mappings to help identify prime and unique agricultural lands, to assist in planning for farm and non-farm conservation practices and are used widely in comprehensive planning for urban development.

DIVISION OF ANIMAL INDUSTRY

Dr. Clarence L. Campbell received his veterinary medicine degree from Ohio State University in 1945. Later that year he joined the Florida Livestock Sanitary Board as a field veterinarian. He became assistant state veterinarian in 1948, acting state veterinarian in 1952 and state veterinarian in 1953. Dr. Campbell was born September 24, 1921, in Indianapolis, Indiana, attending Sebring, Florida public schools and Florida Southern College.



Recently, we have referred to agriculture as "An Investment in the Future". The services provided by the Division of Animal Industry strongly support that theme through avoiding and/or controlling losses to livestock producers. Our regulatory programs are directed towards disease surveillance, control, and eradication; brand registration aids in proving ownership of strayed or stolen livestock; assistance is provided to local law enforcement agencies in investigating thefts of livestock and related farm equipment; and our meat inspection program helps to insure the availability of wholesome products for human consumption. Underlying all of these activities is "prevention"; something which is difficult to quantify and virtually impossible to express in monetary terms. The cost of prevention is truly "an investment in the future"; an investment with an unknown return but which is quite large when one considers that cash receipts from livestock in Florida are estimated to be approximately \$1 billion annually. The introduction and spread of certain diseases, especially those exotic to the United States, could quickly decimate this source of food and income.

It was just this threat — the potential for introduction of foreign animal diseases into the United States through Florida — which led to the department's sponsorship of the Exotic Agricultural Threats Seminar (EATS). The Division of Animal Industry together with the Division of Plant Industry conducted this two-day program in February. Its basic aim was to acquaint law enforcement officials with the problem and to solicit their assistance. Proper handling of foods, animals, and plants which might be in the possession of illegal immigrants or which might be found on boats, aircraft or other vehicles used in drug smuggling operations provided the primary focus. Since these illegal activities originate in areas where serious threats to our animal and plant industries exist, the potential of their role in introducing these diseases or pests becomes quite obvious. Experts of

worldwide renown discussed the areas of concern and national leaders of the affected industries provided their support. Every statewide law enforcement agency in Florida was represented as were local agencies from many of the state's 67 counties. The program received wide acclaim and has been considered a model to be followed by other states who share the problem.

The division's day-to-day program activities are directed through five bureaus (Brucellosis and Tuberculosis, Meat Inspection, Contagious and Infectious Diseases, Diagnostic Laboratories, and Poultry Services) and two units (Marks and Brands, and Equine Disease Control). The Administrative Section, a part of the director's office, provides budgetary, procurement, personnel, administrative, and general clerical support for the entire division. The Maintenance Unit maintains the division's motor vehicles and much of the field and laboratory equipment. Some work is also done for other divisions.

The accelerated brucellosis eradication program initiated during the previous year has become the division's most significant individual effort. It now involves approximately 50% of our personnel and requires nearly 60% of our budget. The current program, prompted by Florida's dubious distinction of having the nation's highest herd infection rate, has been strongly supported by both our beef and dairy industries. As shown by the statistical data which appear later, progress is being made. The total number of cattle tested has shown a 50% increase while the percentage found to be infected has decreased (from 2.60% overall to 2.01%). The number of calves vaccinated has also increased significantly (approximately 78% over the preceding FY), and should result in a higher level of immunity in our younger cattle population.

The workload of the Bureau of Meat Inspection has remained fairly constant. Several new operating procedures have been introduced and others

have been modified to improve the effectiveness and efficiency of the program. Special emphasis has been placed on laboratory analyses to insure compliance with applicable laws and regulations.

The efforts of the Bureau of Contagious and Infectious Diseases continue to be those of monitoring the movement of livestock through auctions and other sales and the surveillance of animals on the farm. These activities are aimed at early detection of contagious diseases so that affected animals may be quarantined and isolated before significant disease spread has occurred.

The Bureau of Diagnostic Laboratories supports all of the division's programs and also provides diagnostic assistance to practicing veterinarians. This requires continual introduction of new techniques and modification of those in use. Among the past year's highlights were:

- Approval by USDA-APHIS to conduct official export tests for bovine leucosis and bluetongue.
- Recertification by the USDA to conduct tests for equine infectious anemia (EIA), hog cholera, and pseudorabies.
- Institution of several new test procedures, including: the indirect fluorescent antibody (IFA) test for equine influenza, equine rhinopneumonitis, feline infectious peritonitis, and canine coronavirus; and the agar gel immunodiffusion (AGID) test for bluetongue.
- Replacement of the hemagglutination-inhibition (HI) test for canine parvovirus with a more rapid and more specific IFA test.
- Initiation of the Veterinary Medical Laboratory Data Processing System with installation of computer terminals at the main laboratory in Kissimmee. Installation of terminals at the other laboratories, planned for the future, will provide an up-to-date state-wide disease reporting system.
- Modification of the isolation building at the Kissimmee Laboratory to provide adequate space for the rapidly expanding virus section.
- Construction of a new outer wall in the entrance area of the Miami Springs Laboratory which encloses additional area for office space and also reduces traffic noise from the heavily used street.

The Bureau of Poultry Services again experienced an increased workload in the pullorum-typhoid, *Mycoplasma gallisepticum*, and *Mycoplasma synoviae* testing programs. This increase

reflects the continual expansion of the state's broiler breeder and hatchery operations.

The Marks and Brands Unit has also placed a greater emphasis on prevention through education. Unit investigators have participated in numerous seminars and other programs designed to provide information on the prevention of livestock theft and other agricultural crimes. One member of the unit served on the attorney general's *ad hoc* Committee on Agricultural Crime to assist in preparing documents on the prevention of crime in agricultural industries for distribution to the general public.

The Equine Disease Control Unit continued its efforts to eradicate equine piroplasmosis by elimination of the responsible vector, *Dermacentor nitens*, the tropical horse tick. There are only five known infected premises in the state at this time, two in Dade County and three in Broward. Only one new case of the disease was diagnosed in the year, this being in a horse imported from Puerto Rico and apparently incubating the disease at that time. The percentage of horses found to be positive for equine infectious anemia has also continued to decrease, dropping from 0.87% to 0.78% over the past year.

STATISTICAL INFORMATION

Division of Animal Industry

Fiscal 1980-81

BUREAU OF BRUCELLOSIS AND TUBERCULOSIS

Cattle Tested for Brucellosis	1,412,609
Percent of Cattle Infected	1.89
Swine Tested for Brucellosis	2,157
Percent of Swine Infected	2.64
Cattle Backtagged at Markets	120,983
Cattle Tested at Slaughtering	
Establishments	149,905
Percent of Cattle Infected	3.17
Calves Vaccinated	280,744
Adult Cattle Vaccinated	64,788
Cattle Tested for Tuberculosis	30,960
Percent of Cattle Infected	0

BUREAU OF CONTAGIOUS AND INFECTIOUS DISEASES

Cattle Inspected at Livestock Markets	683,129
Swine Inspected at Livestock Markets	487,209
Livestock Inspected on Farms	1,632,489
Garbage Feeders	452
Swine Fed Garbage	35,584
Feeder Pig Sales Inspected	175
Feeder Pigs Sold	177,322
Ectoparasite Identifications	268

BUREAU OF POULTRY SERVICES

Disposal Facility Inspections	817
Hatchery Inspections	124
Birds Tested for Pullorum Disease ...	1,721,651
Birds Tested for M. Gallisepticum	1,456,522
Birds Tested for M. Synoviae	1,111,736
Foreign Exports, Baby Chicks	9,306,972
Foreign Exports, Hatching Eggs, doz.	12,679,253

BUREAU OF MEAT INSPECTION

Animals Slaughtered	187,507
Poultry Slaughtered	8,515,863
Red Meat Products Produced Under Inspection, lbs.	360,841,849
Red Meat Products Condemned, lbs.	1,718,059
Poultry Products Produced Under Inspection, lbs.	147,106,320
Poultry Products Condemned on Antemortem, lbs.	249,459
Poultry Products Condemned on Postmortem, lbs.	957,494
Products Certified, lbs.	1,807,219
Products Rejected for Certification, lbs.	22,223

BUREAU OF DIAGNOSTIC LABORATORIES

Cases Submitted	68,332
Tests Performed	254,100

EQUINE DISEASE CONTROL PROGRAM

Animals Sprayed and Inspected	43,230
Horses Tested for Equine Infectious Anemia	59,881
Percent of Horses Infected78

MARKS AND BRANDS - INVESTIGATIVE UNIT

Theft Complaints Investigated	118
Theft Warrants Secured	51
Brand Certificates Issued	394
Livestock Hauler's Permits Issued ...	973

DIVISION OF CHEMISTRY

Dr. Charles H. Van Middellem, director of the Division of Chemistry since September 1, 1973, was born August 6, 1919, in Bruges, Belgium. He received a bachelor's degree in 1944 and a Ph.D. in biochemistry in 1952 from Cornell University. From 1952 to 1973, he was on the research faculty staff with the Institute of Food and Agricultural Sciences, University of Florida, and was in charge of the Pesticide Research Laboratory in Gainesville.



The primary responsibilities of the Division of Chemistry are to conduct laboratory analyses and provide technical evaluations on samples submitted by departmental inspectors and other authorized state agencies. Division laboratories perform various chemical, microbiological and physical analyses in testing and evaluating a wide variety of products sold in the state for the protection of Florida consumers. During FY 80-81, approximately 349,000 separate determinations and tests were performed on 59,000 submitted samples of human food, commercial animal feed, seed, commercial fertilizer, pesticide formulations and chemical residues as well as a wide variety of commodities purchased for use by state agencies. During this fiscal year, the division continued to improve its analytical capabilities through the acquisition of additional modern instrumentation including automated equipment and computerized systems for more efficient data handling and printing of laboratory reports. The trend continues in most division laboratories toward more sophisticated and/or more sensitive instrumental analyses and away from non-specific and time-consuming wet chemistry procedures.

The Chemical Residue Laboratory acquired three high pressure liquid chromatographs for the Tallahassee Laboratory and the field laboratories located in Sanford and Fort Lauderdale. This additional instrumentation enables each of the three laboratories to perform effective analytical screening for residues of several carbamate pesticides on food and feed products. Installation of this sophisticated equipment and appropriate training of laboratory personnel was completed during this fiscal year and regulatory action has already been exercised on a number of samples due to the presence of excessive residues of carbamate pesticides. This liquid chromatographic equipment was also used to analyze for a number of herbicides and their metabolites, previously analyzed by non-specific methods which were not

sufficiently sensitive or very reproducible. The surveillance index, a priority guide used by the inspectors of this bureau for fresh vegetable sample selection, has been implemented during the past year. This index is based on the combination of the propensity for a crop to accumulate pesticide residues and degree of mammalian toxicity associated with the applied pesticide. A new procedure for feed sample selection has also been initiated in that selection priority is now concentrated on feeds that contain ingredients which have a realistic potential for accumulation of significant residue levels from direct exposure to toxic pesticide application during their growing season or during subsequent storage and transport of the feed.

The Feed Laboratory has completed the implementation of an on-line computer terminal with the Mayo Data Center which provides the laboratory with direct input and retrieval of all sample information as well as on site printing of all laboratory reports. The system compares findings to guarantees for constituents and prints deficient remarks when appropriate. Future plans are to use this system with analytical laboratory instrumentation thus eliminating numerous manual calculations and transfer of information. The laboratory continues to have requests to determine the quality of corn used in our state. In addition to a capability for analyzing aflatoxin in field corn by liquid chromatography, the laboratory has acquired a dockage tester to determine broken corn and foreign material.

The Fertilizer Laboratory has continued to increase the number of automated determinations by successfully completing preliminary work on converting the manual determination of nitrogen components to the continuous-flow analytical instrumentation and which will be interfaced with a programmable calculator. Instrumental signals are transmitted directly to the calculator and analytical calculations, previously done manually, will be

performed automatically. When this conversion is completed it will increase the laboratory's automation to approximately 65% of all fertilizer analyses conducted in this laboratory.

During this fiscal year a major priority of the Food Laboratory was to reduce analytical and administrative time to increase overall effectiveness of regulatory programs. Aflatoxin, meats, high risk perishable foods, imported seafood, dilution of orange juice with pulp wash, filth in bakery items, and salmonella contamination continued to be the majority of the analyses performed during the past year. Greater utilization of instrumental methods, constant attention to processed foods from firms with poor regulatory history, greater reliance on and modifications of computerized systems resulted in over 10% increase in samples analyzed compared to last fiscal year with the same number of laboratory personnel.

The Pesticide Laboratory increased its analytical capability with the addition of a new gas-liquid chromatograph. The hot wire and Ni-63 electron capture detectors provided by this instrument replaced older, less sophisticated detectors, thereby expanding present detection capabilities of this laboratory. The interfacing of this instrument to an existing Sigma 10 data system provides for automated manipulation of the analytical data generated by the gas-liquid chromatograph.

Seed germination tests, under Seed Laboratory conditions, require the distribution of seeds on blotters or towels in a set pattern. In the past, this has been done with vacuum placement devices or by relatively slow, expensive, and hazardous hand seeding methods. The purchase and implementation of an Electronic Germination Blotter Seeder during this fiscal year has resulted in automating the process of placing some kinds of seed on the germination media. Moreover, this electronic seeder provides laboratory personnel much greater protection since they do not have to physically handle the seeds, thereby significantly reducing

employee exposure time to poison-treated seed.

The Methods Development Laboratory Section has continued to work closely with other bureau laboratories in the division to develop and implement improved analytical methodology. Using high pressure liquid chromatography with fluorescence detection as a quantitative tool, a systematic study of extraction and clean-up procedures for determination of aflatoxins was made. Simultaneously, a very rapid and accurate modification of an existing HPLC procedure for analysis of corn and corn products was developed. An evaluation was made of procedures for digestion of protein in feed and fertilizer samples utilizing an aluminum block heating unit. Use of this digestive unit allows automation of nitrogen determination while consuming considerably less electrical energy than conventional digestion procedures. In cooperation with the Chemical Residue Laboratory, an improved analytical technique was developed for determination of the primary carbamate pesticides used commercially on Florida vegetables. This procedure employs liquid chromatography and an automated post-separation derivitization step to enhance carbamate sensitivity to low level detection. A more rapid clean-up procedure, using modern separation techniques, is being developed so that residues of carbamate pesticides, applied to vegetables in the state, can be more effectively analyzed by the Chemical Residue laboratories.

Sampling by Commodity Testing Laboratory during this fiscal year concentrated on verification of the quality of commodities purchased by state agencies and institutions using state contracts and Department of Education qualified products lists. A new program was also undertaken to test carpet used in state construction projects administered by the Department of General Services. A significant improvement in overall analytical efficiency (represented by a 42% increase in samples examined over the average output of the five previous years) was facilitated primarily by more rapid sample preparation times resulting from the acquisition and use of a hydraulic die-cutting machine.

DIVISION OF CONSUMER SERVICES

Jane Wilson Robinson was appointed director of the Division of Consumer Services in August, 1976, by Commissioner of Agriculture Doyle Conner. She is a former representative and served in the Florida House from 1970 through 1976. Before moving to the state in 1967, Mrs. Robinson was a reporter and worked for newspapers from New York to Colorado. She is a member of the National Rape Prevention and Control Advisory Committee, the Florida Advisory Council to the Civil Rights Commission, the USDA Regulatory Users Group Advisory Committee, the Dispute Resolution Alternatives Committee, and a founder of the Hacienda Girls Ranch in Melbourne. She was born June 22, 1926, in Oklahoma City, attended schools in Mexico City, Hawaii, Manila and the University of Oklahoma in Norman, Oklahoma. She and her husband, George A. Robinson (USAF Ret.) have four children.



The past fiscal year was an extremely busy time for the Division of Consumer Services. Highlights include:

- A \$125,000 annual energy program to be conducted by the division in conjunction with the Public Service Commission was mandated by the 1980 Florida Legislature.
- The division was made responsible for administering tough new provisions added by the 1980 Legislature to Florida's health studio law.
- Over 200 businesses affected by the 1979 Business Opportunities Act filed financial disclosure and filing fees with the division in order to do business in Florida.
- Written consumer complaints received by the division increased by 51 percent.
- Over one and one-quarter million pieces of consumer education materials were distributed by the division to interested Floridians.

New Programs

The Florida Energy Efficiency and Conservation Act formulated by the 1980 Florida Legislature requires the division to offer information and assistance to consumers who want to locate contractors, materials suppliers and lending institutions for energy related home improvements.

The lists will be made available to consumers through their utility company for reference in planning energy conservation improvements to their homes.

To be listed, contractors, materials suppliers and lending institutions must agree to comply with certain federal and state standards and to participate in conciliation conferences.

The division is also responsible for conciliation conferences arising from consumer complaints against businesses on the lists.

The new program will increase the division staff by four full-time positions. A consumer services coordinator will oversee and administer the program. In addition, a consumer complaints analyst and two-person staff will be employed to operate the new program.

Another program the division will administer stemmed from an existing law.

The 1980 Florida Legislature added several strong provisions to the state's existing health studios law and made the division responsible for compliance.

Under the revised law and effective July 1, 1980, all new health studios and those in operation less than three years must post a \$25,000 bond or make other financial guaranty with the division. Affected health studio operations will be required to make the financial arrangements before an occupational license can be obtained from the county or city.

The new provisions are an additional safeguard for consumers who buy memberships to health studios. In the event the studio closes, monies posted with the division may be available to reimburse consumers holding contracts.

Statistics compiled by the division indicate success with a program mandated by the 1979 Florida Legislature. In accordance with the 1979 Business Opportunities Act, over 200 national and local companies selling business opportunities have filed financial disclosure forms, paid a fee to register and, in some cases, posted a financial guaranty with the division in order to do business in Florida. The act was designed to rid the state of fly-by-night business opportunities and franchise sellers and is considered successful.

Complaints

Business boomed in the complaints section during fiscal year 1979-80. Written complaints received during the period increased 51 percent. 14,603 written complaints were received during the period as compared to 9,697 during the previous fiscal year.

Complaint-related telephone calls also experienced a tremendous increase. During fiscal year 1979-80, 47,955 telephone calls were received as compared to 34,082 in the previous year. It was an increase of 41 percent.

The additional workload was due in part to a December, 1979, agreement between Commissioner Conner and Florida Attorney General Jim Smith. Before the agreement the attorney general's office had accepted consumer complaints and processed them accordingly. However, Florida Statutes 570.544 mandates that the division act as the sole consumer complaint clearinghouse for Florida. Initially, approximately 5,000 complaints are forwarded as they are received.

Also, moving and storage complaints once covered by the defunct Public Service Commission trucking regulations (abolished by the 1980 Florida Legislature) are being forwarded to the division. The action was effective July 1, 1980.

The additional complaint load for fiscal year 1979-80 was received and handled by the division with no corresponding addition in staff personnel.

Education

The number of Floridians reached by division education programs continues to increase at a rapid rate.

During fiscal year 1979-80, 1,251,926 pieces of consumer education materials were distributed. The figure is strictly for educational materials and

does not include complaint, inquiry or other business-related correspondence.

The enormous number of materials distributed can be attributed to two reasons:

First, the division received excellent publicity and cooperation from the Florida media in publicizing materials and programs available. Second, the division continues to produce new brochures and obtain federal materials for distribution as the need arises. Currently, division published brochures are available about advertising, auto repair, complaints, credit, door-to-door selling, home repair, insulation, landlord/tenant, small claims court, solar energy and work-at-home schemes.

Clipping service results show the weekly question/answer column, "On the Consumer's Side" is increasingly used as a feature in newspapers' "Action Line" columns. It is also reproduced entirely by many weekly newspapers throughout the state. Approximately 550 copies are distributed by the department to newspapers, radio and television stations throughout Florida.

DOLLARS AND SENSE, the division's general interest monthly newsletter, has almost doubled in circulation excluding losses to the 1979 purge since its debut in April, 1978. Approximately 13,000 copies were distributed monthly at the close of fiscal year 1979-80.

Many news releases about consumer problem areas were released during the fiscal year. Releases asking Floridians for opinions on the Anthony dollar and implementation of the metric system in the state received considerable attention. Hundreds of letters expressing all points of view were received from consumers throughout the state and were forwarded to the proper federal authorities for their information and use.

Letters about the Anthony dollar forwarded to Congressman Frank Annunzio were cited by him in the *Congressional Record* in the latter part of 1979. Annunzio is chairman of the House Of Representatives Subcommittee on Consumer Affairs.

The division had focused a great deal of attention on the use of television and radio programs as a method of reaching Floridians with consumer information.

In the past fiscal year, division personnel participated in over 50 television and 25 radio programs broadcast throughout Florida. Most television programs were five-to ten-minute segments on commercial station talk shows with high audience ratings. The division radio time was split between commercial station public affairs programs

and the department-originated radio network. The number of Floridians reached by the television and radio programs is almost incalculable, but can be estimated in the millions.

A continuing educational service offered by the division is presentations on consumer interest topics throughout the state. In the past fiscal year over 50 speeches were given by division personnel to school classes, civic clubs, business associations and other interested groups throughout Florida.

The division's traveling exhibit, a four-color, professionally designed display explaining the work done by the office, was presented in ten locations throughout the state during fiscal year 1979-80.

Teletypewriter

The division has offered a special service to deaf Floridians who have access to a teletypewriter machine since January, 1978. The teletypewriter (referred to as a TTY), allows deaf callers to communicate by telephone. It looks like a conventional typewriter and is connected to the division's local and state-wide WATS line telephone system.

Any person in Florida with access to another TTY can dial the division locally or through the toll-free system and communicate with division personnel about a consumer problem.

After the telephone is mechanically connected to the teletypewriter, the caller and a division employee communicate by sending typed messages through the telephone line.

The TTY is used mainly to give information or accept consumer complaints from deaf Floridians. During the 1980 legislative session, some deaf callers were able to get up-to-date information on pending bills by using a TTY to contact the division. They also were able to use the division TTY to send messages to legislators and committees.

Senior Citizens

The Senior Consumer newspaper, published and distributed free by the division each month, has been a tremendous success story.

The result of a federal grant and the cooperation of the Aging and Adult Services Program of the Florida Department of Health and Rehabilitative Services, the newspaper began production in December 1977.

At the end of fiscal year 1979-80, 50,000 copies per month were being distributed to interested Floridians, including many winter residents. The newspaper continues to receive daily requests for

additions to the mailing lists and has been very well received by its readers. Proof of its acceptance can be shown in the tremendous number of "letters to the editor" received from readers each month.

The Senior Consumer is designed especially for Florida's older residents. It is an eight-page tabloid-size newspaper set in large, easy-to-read type. Each monthly issue is packed with information of particular interest to seniors. Typical news stories report on active and interesting seniors and senior-oriented activities throughout the state; social security and medicare information; low-cost recipes designed for one or two persons; information about federal and state legislation with impact on seniors; and other features of interest to seniors.

The Senior Consumer was Florida state government's first publication of its kind and is the only state-wide publication devoted to disseminating consumer information to senior citizens. Since almost one quarter of the state's nine-million residents are over 60 years of age, the publication is targeted to an important interest group.

Consumers' Council

The division is assisted in its efforts to protect and educate consumers by the Florida Consumers' Council, a state-wide appointed body composed of representatives from business and consumer interests in the state.

The council is responsible for studying consumer protection laws, advising and recommending action to Commissioner Conner and analyzing matters affecting the interests of Florida's consumers.

The council meets several times each year and is heavily involved in studying prospective bills to be presented to the Legislature each year.

During the 1980 legislative session, eight bills recommended by the council to Commissioner Conner became law. The bills included the Residential Energy Conservation Act, the new provisions to the state's health studios law and the concept of the Roth Act regarding condominium conversion.

DIVISION OF DAIRY INDUSTRY

Jay Boosinger was appointed Director of the Division of Dairy Industry in February 1976. He is a graduate of Manatee County High School, Bradenton, Florida, and a 1961 graduate of the University of Florida, where he received a Bachelor of Science degree in Dairy from the College of Agriculture. He served as a Dairy Specialist with the division from 1964 to 1967, prior to his promotion as assistant director of the division, a position he held until his appointment as director. Mr. Boosinger has just been elected to a second term as Chairman of the National Conference on Interstate Milk Shipments and is the current President of the Dairy Division of the National Association of State Departments of Agriculture for 1981-82.



The Division of Dairy Industry enforces the Milk and Milk Products Law and Rules and Regulations, Ice Cream and Frozen Dessert Law and Rules and Regulations, and administers the Interstate Milk Shippers Program for the state of Florida.

Office of the Director

The Office of the Director is composed of a director, an assistant director and their secretaries, who furnish administrative direction and support for the Bureau of Dairy Farm Inspection, Bureau of Dairy Products Inspection and the Bureau of Dairy Laboratories.

Under the direction of the Office of the Director, the Division of Dairy Industry conducts the Interstate Milk Shippers Program. Two dairy consultants, certified as Milk Sanitation Rating Officers by the United States Public Health Service, have the responsibility of insuring uniform interpretations of the Pasteurized Milk Ordinance thus enabling Florida dairy products to be shipped in interstate commerce. A chemist has been assigned the fulltime responsibility of a laboratory evaluation officer whose primary duty is to promote uniformity and accuracy in the division's and industry's laboratories.

Bureau of Dairy Farm Inspection

The Bureau of Dairy Farm Inspection is responsible for the enforcement of Florida's Milk and Milk Products Law and Rules and Regulations as it pertains to the production of milk on Florida's permitted dairy farms.

The bureau issues permits to dairy farms after each farm demonstrates that it can maintain the high sanitary and quality standards as outlined in the Florida law. It approves new construction, equipment and any renovation to existing facility or

equipment. It insures that proper milking procedures are followed and insures that each dairy farm observes Florida's rigid annual health regulations.

At the close of fiscal year 1980-81, Florida had 408 permitted dairy farms on which 1892 official inspections were made; 5016 certified samples collected; 734 investigative samples; and 184 stop sales and hold orders issued.

The Dairy Division Honor Roll recognized 43 dairymen for quality production.

Bureau of Dairy Products Inspection

The Bureau of Dairy Products Inspection is responsible for the enforcement of Florida Milk and Milk Products Law and Rules and Regulations and the Ice Cream and Frozen Dessert Law and Rules and Regulations as they pertain to the regulations of milk, milk products, ice cream and frozen dessert plants, depots, delivery vehicles and bulk milk haulers.

During fiscal year 1981-82, the Bureau of Dairy Products regulated 33 milk and milk products plants; 36 ice cream and frozen dessert plants and 149 depots and distribution centers located in Florida. The bureau also regulated 77 milk and milk products plants; 10 depots and distribution centers; and 116 ice cream and frozen dessert plants located outside of the state. In the regulations of these plants and facilities the bureau employees collected 6368 certified samples; 4421 shelf-life samples; made 415 official inspections; made 354 pasteurizer checks; licensed 8 hauler services and 127 haulers; and issued 103 Hold Orders and Stop Sales.

Bureau of Dairy Laboratories

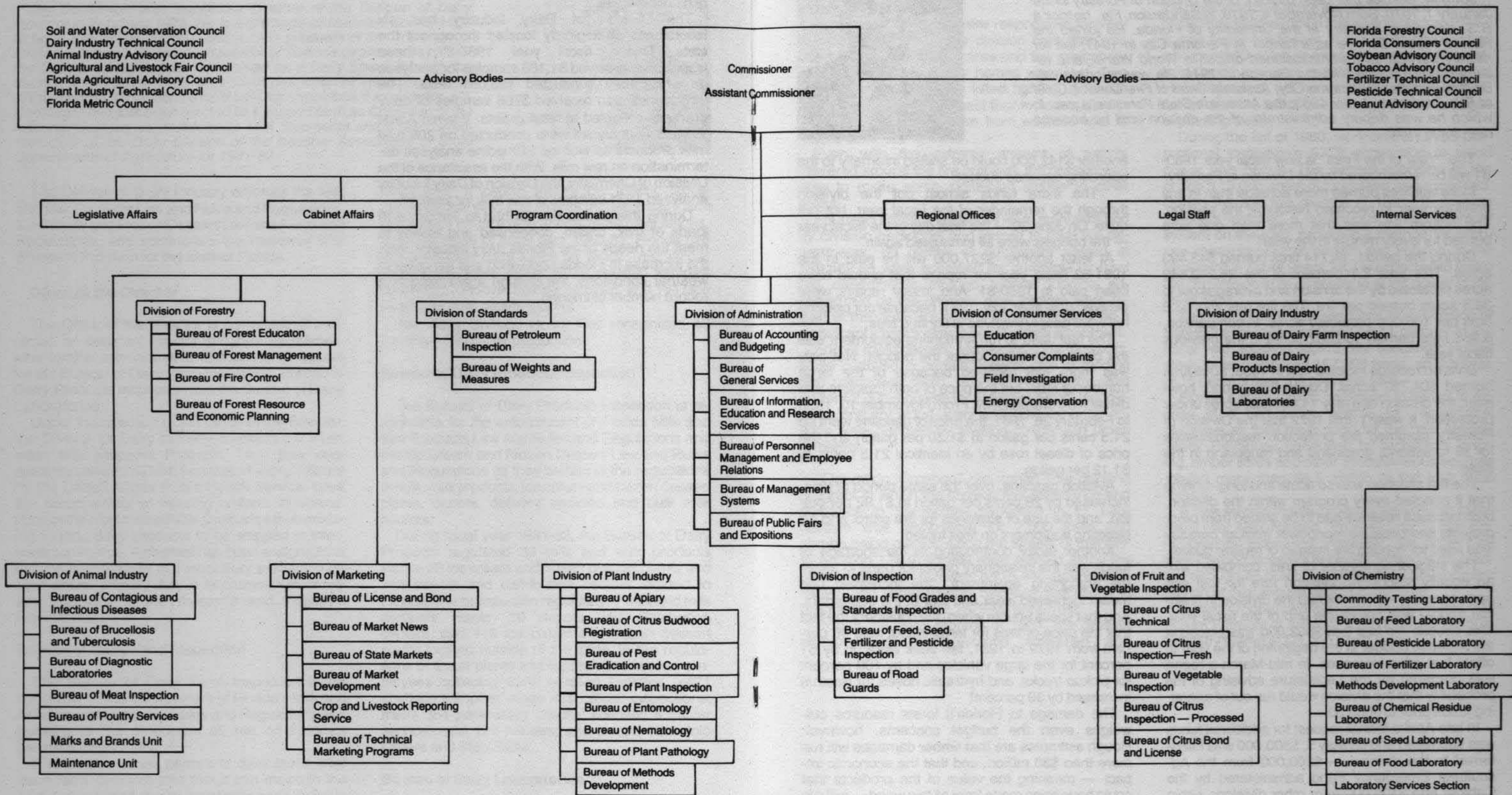
The Bureau of Dairy Laboratories performs all official tests on milk, milk products, ice cream, fro-

zen desserts, single service containers, water and other analyses as required by Florida law in the production, processing, packaging and distribution of dairy products.

The Division of Dairy Industry has six laboratories strategically located throughout the state. During fiscal year 1980-81, these laboratories received 31,186 samples for analyses on which they conducted 196,081 tests. The laboratories also received 3766 samples of dairy products collected at retail outlets. Vitamin A and Vitamin D analyses were conducted on 206 fluid milk products as well as 110 iodine analyses determination on raw milk. With the assistance of the Division of Chemistry, the Division of Dairy Industry analyzed 1231 samples of raw milk for aflatoxin.

During this period Florida had to import 5519 loads of milk, cream, condensed and blends to meet the needs of the Florida dairy industry. With the increase in Florida population and the adverse weather conditions, the division again expects a record number of imports.

ORGANIZATIONAL CHART



DIVISION OF FORESTRY

John M. Bethea has been director of the Division of Forestry since January 1, 1970. Born November 4, 1919, at Sanderson, Fla., he took a B.S. degree in Forestry at the University of Florida. He joined the Florida Forest Service as a ranger in Panama City in 1941, left for military service as a commissioned officer in World War II, and resumed employment with the Service in 1946. He was successively District Forester at Panama City, Assistant Chief of Fire Control, Chief of Fire Control and after 1963, the Associate State Forester, a post in which he was deputy administrator of the division until he became director in 1970.



The "Year of the Fires" is how fiscal year 1980-81 will be remembered by the Division of Forestry.

More wildfires burned more acreage than in any previous year in recorded history of the division. The bottom line was that more than one acre burned for every minute in the year!

During the period, 14,114 fires burned 543,493 acres. This was 2.1 percent of the 26,242,642 acres protected by the division and averages out to 38.5 acres burned per fire. The fire rate was 53.8 fires per 100,000 protected acres. In comparison, 6,986 fires burned 108,802 acres in the previous fiscal year.

Division records indicate that in 1955, 8009 fires burned 404,733 acres. During that period, however, the division had only 14,830,922 acres under protection. It wasn't until 1972 that the Division of Forestry assumed fire protection responsibilities for all forestland, grassland and rangeland in the state.

The fire situation was so acute and long-running that it affected every program within the division, both because revenue had to be shifted from other projects and because manpower from all bureaus was used for fighting fire instead of regular duties.

The staggering number of fires, combined with an equally staggering inflation rate for fuel and parts to repair equipment had the division in financial trouble well before the end of the fiscal year. This despite the fact that \$302,000 was placed in the expense budget at the beginning of the year to offset fuel price increases. In mid-March a report was prepared for the Legislature advising of the probability that the division would run out of operating funds prior to June 30.

In late April a formal request for additional funds was submitted and on May 5, \$300,000 was transferred to the division — \$200,000 from the Agricultural Emergency Fund administered by the Cabinet and \$100,000 from other divisions within the Department. In addition, operating capital outlay purchases were cut back at this time so that

another \$142,000 could be shifted internally to the operating expense budget.

The extra funds almost got the division through the remainder of the fiscal year, but not quite. On June 30 — the final day of the fiscal year — the budgets were all exhausted again.

At least another \$227,000 will be paid in the 1981-82 fiscal year for repairs that should have been paid in 1980-81. And, many repairs were delayed until after July, 1981, because our personnel were deeply involved in fighting fires.

The fuel used to run firefighting equipment was the biggest item that upset the budget. Not only was more fuel required because of the large number of fires, but the price of both gasoline and diesel rose dramatically. From November 10, 1980 to February 26, 1981, the price of gasoline went up 21.5 cents per gallon to \$1.20 per gallon and the price of diesel rose by an identical 21.5 cents to \$1.12 per gallon.

Aviation gasoline, over the same period of time, increased by 26 cents per gallon to \$1.92 per gallon, and the use of airplanes for fire patrol and for directing equipment on fires tripled.

Another factor contributing to the shortage of funds was the inflationary prices for parts to repair the firefighting equipment. The increased use meant increased wear and tear of the equipment. And that spells trouble when one considers the fact that the price of tires for large trucks rose 46 percent from 1979 to 1981, fan belts were up by 51 percent for the large vehicles and by 109 percent for pickup trucks, and hydraulic hoses for tractors increased by 39 percent!

The damage to Florida's forest resource outweighs even the budget concerns, however. Rough estimates are that timber damages will run more than \$30 million, and that the economic impact — meaning the value of the products that could have been made from all this wood — will run about \$660 million.

Other damages cannot be measured in dollars.

Florida's scenic qualities were harmed; smoke pollution in large quantities was added to the air; wildlife habitat and outdoor recreational opportunities were greatly inhibited.

Fortunately the fires were responsible for very few deaths (not a single division firefighter was killed fighting the 14,000 fires and few serious injuries occurred) and few homes were lost. Two federal employees were killed fighting a fire on federal property and at least four motorists died in accidents in which smoke from wildfires was at least a contributing factor.

Even with the extreme amount of activity centered around the fire problem, the division was able to make some significant strides in other areas.

Fourteen Fastack fire trucks were manufactured by division personnel and leased to rural fire departments; 88 pieces of equipment valued at \$69,589.85 were approved for purchase by rural fire departments through federal funding administered by the division; nine tractors were rebuilt at the division's central shop, representing a significant savings over the cost of new equipment.

Forest management assistance to landowners, while curtailed in certain aspects due to funding and manpower drain, was still noteworthy. Just under 52,000 requests for assistance from landowners, primary wood-users and governmental entities were handled by division county and urban foresters.

"Operation Greenup", an urban tree-planting program in which the division lent assistance and guidance to low-income minorities in Ft. Lauderdale was responsible for 2,000 trees and shrubs being planted along the streets of that city. In addition 176,075 trees were planted along the state's interstate highways and 5,446 around state Health and Rehabilitative Services institutions in programs began in the 1979-80 fiscal year.

During the early months of 1981, the division employed 10 "reforestation salesmen and

saleswomen" to contact small landowners in 10 targeted North Florida counties which have the largest numbers of small private landowners and the most available acres for reforestation. The goal of the Pine Reforestation Initiative Program (PRIP) is that every landowner in the targeted counties who owns 10 acres or more of commercial forestland (land growing or capable of growing crops of industrial wood) will be visited in person or contacted over the telephone and told the advantages of planting trees.

During the fall of 1980, work on the Union Correctional Institution's (UCI) conversion to wood power was begun. The current condition of the prison's 13,000 acres of forestland was assessed. During the first two months of 1981, 13 division foresters installed a continuous forest inventory system on the tract, providing a method for accurate measurement of growth and volume of the forestland in future years. UCI is expected to make the conversion from oil power to wood power in the fall of 1982.

The sale of bare root seedlings from Division of Forestry nurseries increased by 11 percent in the fiscal year, totalling 48,472,692 seedlings. Potted stock sales numbered 167,996 trees, an increase of 15 percent over the previous year.

Florida's state forests continued to attract in excess of a half-million visitors for recreational purposes as they have done for the past several years. Revenues generated by recreation, grazing, timber sales and other miscellaneous sources totaled more than \$4.5 million at the four state forests.

A new environmental program was begun in the fiscal year also. Named "Project Leap" (Local Environmental Education Program), the project allows division foresters to guide fifth and sixth graders through an outdoors study of the environment as part of their regular school curriculum.

A third program working with students saw 203 Future Farmers of America attend the 47th annual Forestry Camp at O'Leno State Park.

DIVISION OF FRUIT & VEGETABLE INSPECTION



Herbert M. Riley was born April 5, 1904, in Butler, Georgia. He was graduated from Gordon College in 1923 and employed by the Federal-State Inspection Service of the department in 1927. He remained in that capacity until July 1, 1939, when he received Federal Civil Service appointment. He became supervisor of Florida in charge of inspection of fruits, vegetables, and nuts for grade, quality and condition under a cooperative agreement between the United States Department of Agriculture and the department. He was appointed Director of the Division November 1, 1963. Mr. Riley has been honored frequently by the agencies he's worked with and the industries he oversees, and in February of 1978 was inducted into the Florida Citrus Hall of Fame. On August 30, 1979, Mr. Riley was presented with the Department of Agriculture & Consumer Services Distinguished Service Award.

Headquarters for the Division of Fruit & Vegetable Inspection is in Winter Haven. The Vegetable Inspection Bureau Headquarters is located in Orlando.

This division is charged with the responsibility of carrying out the requirements of the Florida Citrus Code. Citrus inspection is mandatory under this code, and this division serves Florida's fruit and vegetable industries by providing trained inspectors and an efficient inspection program to meet these requirements.

Certificates must be issued on every fresh citrus shipment, and every load of fruit in every processing plant must be certified. Through contractual arrangements with the U.S.D.A., the canned and concentrated pack are certified. This division is also responsible for fumigating citrus for export.

The Florida Citrus Code and Citrus Commission require every citrus fruit dealer to be bonded and licensed, chiefly for the protection of the producer. The legislature amended the Florida Citrus Code in 1979 to allow applicants for Citrus Fruit Dealer's Licenses to post certificates of deposit with the commissioner of agriculture in lieu of cash or surety bonds. The number of boxes an applicant will handle during the season determines the amount of the certificate, which must be fully insured and assigned to the commissioner of agriculture.

Automated test units in testrooms of Florida's citrus processing plants are proving to be valuable aids to efficient operation. During the 1980-81 fiscal year, this division had 31 automated test units operating in the testrooms of 28 commercial processing plants. These systems electronically weigh for juice content, titrate for acidity and de-

termine degrees Brix. The computer then uses this information to calculate pounds juice per box and pounds solids per box, and prints out an official inspection certificate. These testroom results are more accurate and reliable than those obtained manually, as all human error is eliminated. Approximately 89% of the total fruit volume processed was tested with the new equipment. One additional system for next season has been approved by the division and the citrus processors, which means that 90% of the processed fruit volume for next season will be tested with the automated systems.

The program initiated to monitor all imported concentrates and any suspect domestic concentrates for the presence of pulp wash solids and adulteration has continued. The equipment required includes a UV-visible spectrophotometer and a spectrofluorometer, both of which are very sophisticated pieces of equipment. During the season, approximately 600 samples of FCOJ, single strength orange juice and orange pulp wash solids were analyzed.

Beginning with the current season this division will be utilizing data processing facilities located in Tallahassee. This should be more efficient and will provide greater flexibility, enabling this division to provide reports which they did not have the capabilities of providing previously, due to the obsolescence of the old equipment.

Working in cooperation with the market research staff of the Department of Citrus, equipment has been installed in the Statistical Section to gather merchandising information pertaining to the destination of all fresh citrus shipments. Approximately 1,000 destinations have been recorded, including

31 foreign countries. Data on the fruit variety and number of boxes is collected on all shipments. This information is transmitted by computer to Gainesville. It is then processed by the Department of Citrus for publication in monthly and annual reports on fresh fruit shipments, for distribution to fresh fruit packers and Department of Citrus merchandising representatives.

The Fiscal Section has been provided with a terminal tying into the statewide accounting system. This equipment makes available more timely budget and cash information, thereby enabling the division to improve its investment program for excess citrus inspection trust funds.

The Bureau of Citrus Inspection inspects and certifies all citrus fruit sold or shipped in fresh form for domestic and export trade ... a total of more than 57 million 4/5 bushel boxes during the 1980-81 citrus fruit season. This total is down by approximately 15 million cartons from the 1979-80 season because of the freeze in January 1981. In cooperation with the Florida Citrus Packers and the U. S. Department of Agriculture, the bureau has been actively conducting field research in areas of fruit sizing, optional pack, container tolerance, fill and bulge. Many of the bureau's recommendations have recently been adopted by the Department of Citrus and the U. S. Department of Agriculture. Recognizing the need to stay abreast of a constantly changing industry is resulting in benefits to processors and consumers alike.

The Vegetable Bureau inspects and certifies thirty different types of produce grown in Florida. In addition, the bureau offers terminal market inspection in Jacksonville, Tampa and Orlando. This service is also available on request for any receiver in the state. The bureau operates under three separate Federal Marketing Orders and a Price Support Program on the following commodities: tomatoes, limes, avocados, and peanuts, all of which require grade, size and container certification. Tomatoes, in addition, require weight certification. The bureau also maintains a compulsory positive lot identification program on peanuts, as

well as on limes and avocados. This program is optional on tomatoes, unless the Manifest Inspection Certificate is used, then the program becomes mandatory. The bureau carries on a very extensive training program for new personnel, as well as refresher classes for permanent employees. The past year was filled with unusual conditions for Florida growers. A severe drought caused drastic shortages of peanuts last fall. In January, a statewide freeze either killed or retarded growth of almost all spring plantings as far south as Homestead. The replantings resulted in a serious overlap between the various growing areas, which caused extremely high prices and low volume in the early spring, and a glut in the late spring causing a severely depressed market for most vegetables. The only bright spot in the bureau continues to be the increase in the number of terminal market inspections in Jacksonville, Tampa and Orlando.

The Citrus Bond and License Bureau is concerned with those sections of the Florida Citrus Code pertaining to citrus fruit dealer's bond requirements, issuance of citrus fruit dealer's licenses, citrus fruit dealer's agent registrations, packing house and cannery registrations and field box mark or brand certificates. A complete listing of all citrus fruit dealers and their agents is compiled several times each season. Administrative responsibilities include extensive field work in the investigation of purchases or sales of citrus fruit in all forms. Complaints involving citrus fruit are filed with the commissioner of agriculture and handled as provided for in the Citrus Code and other applicable statutes. The appropriate Order, based on sworn testimony, is entered by the commissioner with provision for suspension of license for failing to comply. All interested parties are served with the Order and the file is closed upon compliance. In cooperation with the Department of Citrus, the bureau makes regular inspections of gift fruit shipments and all citrus roadside stands. In the past season:

1460 Dealers posted Surety Bonds amounting to	\$16,339,500
15 Dealers posted Certificates of Deposit for	190,000
3 Dealers posted Cash Bonds amounting to	<u>3,750</u>

Total Amount of Citrus Fruit Dealers Bonds	<u>\$16,533,250</u>
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47 Bond Increases after Notice from Commissioner	
34 Bond Increases after Order entered by Commissioner	
Bond Increases after Notice amounted to	\$400,300
Registered Shippers and/or Cannery posted Inspection Fee Guarantee Bonds amounting to:	
Cash and Certificates of Deposit	\$ 3,150
Surety Bonds	<u>718,000</u>

Total	<u>\$721,150</u>
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168 Dealers "Advertising as Bonded Shipper" posted Performance Bonds in accordance with Chapter 57-4, Laws of Florida, Surety Bonds	\$168,000
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162 Certificates as provided by Department of Citrus, Rule 20-43.04 issued on request to dealers posting Performance Bonds	
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217 Licenses issued to "Bond Exempt Dealers"	
Citrus Fruit Dealers Licenses issued	1,695
Manufacturer's Licenses issued	21
Citrus Packinghouses Registered	186
Canning and/or Concentrate Plants Registered	81
Registered Agents of Citrus Fruit Dealers	<u>1,209</u>

Fumigation is required for all fruit going to Japan, Texas, Arizona, California, and Hawaii. Meeting all of the requirements of environmental agencies on fumigation has been a real problem, but the Fumigation Bureau has been able to meet them, thus far. There is a continuing effort to improve working conditions of state personnel working on fumigation, and to further reduce the EDB residue left in fruit and cartons. There have been three modifications made at the fumigation chambers this summer to accomplish these factors: (1) Chamber stacks have been raised at both sites; (2) Hallways at both sites have been enclosed, and exhaust fans installed in ceilings to induce fresh air into the hall; (3) A chamber has been modified to induce 100% fresh air during the aeration process. This will hopefully reduce residue in fruit and cartons. Monitoring of this project will be carried out under the direction of Dr. Bill Miller, IFAS and Dr. Ismail, research scientist with the Department of Citrus, during the fumigation season.

DIVISION OF INSPECTION

Vincent Giglio joined the department as an inspector in 1953. Following promotions to supervisor and assistant director, he was appointed division director October 1, 1967. A native of Tampa, he was educated in the public schools and received a degree in horticulture in 1949 from the University of Florida, after serving in the Army Air Corps from 1943-45. He recently retired from the Air Force Reserve with the rank of Colonel.



The Division of Inspection is charged by legislature with the responsibility of enforcing a variety of laws which protect consumers and also performs a service to industry by preventing unfair trade practices. The primary purpose of the division is to assure consumers that the quality and quantity of the product purchased conform with the declaration on the label.

The division's duties include food grade and standard (including poultry and eggs) inspection; feed, seed, fertilizer and pesticide inspection, fence posts inspection and the inspection of vehicles transporting agricultural and horticultural products and livestock.

Thousands of inspections are performed daily throughout the state to assure that food, feed, seed, fertilizer and pesticides being offered or held for sale conform to the requirements of applicable laws and regulations. Food processing plants, soft drink bottling plants, bakeries, warehouses, retail stores, farms, chemical plants, vehicles, etc., are inspected regularly for conformance with appropriate laws and rules. Samples are drawn for laboratory analysis, packages weighed, and if found in violation of applicable laws or rules, the products are placed under stop-sale orders or other appropriate action taken. Where food products, including poultry and eggs, are found to be adulterated they are destroyed. Some products may be remanufactured to bring about lawful compliance. Various other actions may be taken whenever necessary to ensure or bring about conformance with the regulatory provisions of the Florida Statutes.

Bureau of Food Grades & Standards

The Bureau of Food Grades and Standards continued its comprehensive consumer and industry protection programs during the year. Sixty-three thousand inspections of food processors, distributors and retailers were conducted to monitor

and insure compliance with all provisions of Florida's food laws; sanitation, food wholesomeness, fair packaging and labeling, and protection against merchandizing deceit. Over 8,000 "Stop Sale Orders" were issued during the course of these inspections and nearly a million pounds of foods found in violation of state laws were condemned. In addition, more than 700 consumer complaints were individually investigated.

State-federal cooperative programs were also active. The Poultry and Egg Section was extremely busy meeting an ever increasing demand for export certification of poultry, shell eggs, and egg products. Workload in this area is expected to increase during the 1980's as Florida ports gain volume. Contract inspection work for the Food and Drug Administration generated an equally busy schedule. One thousand inspections were performed for that agency and special assistance was provided them during an emergency nationwide recall of contaminated canned mushrooms.

The bureau also entered into a new state-federal cooperative program during the year when the National Marine Fisheries Service and the Southeastern Fisheries Association jointly approached the Division of Inspection to request assistance in providing industry inspection, grading and certification services for Florida's expanding export and interstate market. An agreement was successfully negotiated whereby bureau inspectors will augment the National Marine Fisheries Service to meet industry demand for these services.

Road Guard Bureau

The Road Guard Bureau continues to grow and expand in many areas, as well as taking on new responsibilities of inspection. For example, the 1981 Legislature passed a Fuel Tax Law (Fuel Use Tax Permits) making it necessary for certain motor carriers to purchase permits and display them on their vehicle, and this bureau will be one of the

principal enforcers of this law.

The bureau made application and received approval to install a computer terminal (NCIC-FCIC) on Interstate 75 which will give us a broader coverage and faster information on stolen agricultural, horticultural and livestock products.

One of the outstanding accomplishments of the year was the employment of a training coordinator by the Inspection Division, and which we have been using to a great advantage these past several months.

Another highlight of the year was the reclassification of a great number of our inspectors to road guard inspection special officers. The 1981 Legislature provided substantial salary increases to both these officers and supervisors, and they were each placed in special risk status. All of our employees who meet the requirements of the Police Standards Training Commission have been trained and are certified, with the exception of some that were recently employed and they will be trained in the very near future.

Bureau of Feed, Seed, Fertilizer and Pesticide

Improved procedures have been adopted to provide a more effective weights and measures control program in the bureau. Over 65,000 packages of feed, seed, fertilizer and pesticide were weighed. Nearly 500 lots of these commodities were found deficient in weight and appropriate action taken. An increase in bulk weighings was accomplished during the year.

Pesticide regulatory matters have been a demanding issue within the bureau during this past year. Forty-six Special Local Need applications for registration under the Federal Insecticide, Fungicide and Rodenticide Act required close scrutiny, as did labels for over 9,000 brands of pesticides which were submitted by approximately 1,200 chemical manufacturers and distributors for registration. Seven Emergency Exemptions were obtained from the Federal Environmental Protection Agency for emergency use of certain pesticides in the state. Without such an exemption, celery growers, for example would have been unable to control vegetable leafminers and produce a celery crop. Through cooperative effort of the Department of Agriculture and Consumer Services and the Cooperative Extension Service of the Institute of Food and Agricultural Sciences, over 22,000 pesticide applicators have been trained, certified and licensed since the program began in 1976.

The Pesticide Enforcement Section completed its first full year's activities under a federal grant. Over one thousand inspections and investigations were accomplished. Results of these investigations led to the issuing of 223 warning letters and 18 Stop Sale Orders to correct misuse of pesticides and the distribution of deficient or misbranded products.

The Fertilizer Section processed over 12,000 samples, nearly 800 more than during the previous year. Fertilizer movement throughout the state was interrupted during the spring and summer due to extreme drought conditions in Central and South Florida. Over 31,000 fewer tons were distributed during the past year. Total registered brands exceeds 71,000 now, about 5,000 over last year. New procedures were established to select lots to be sampled, in order to better represent the tonnage being distributed.

An administrative hearing was held as a result of a petition by Florida Agricultural Research Institute and associated member firms. This petition challenged certain procedures and tools used in sampling and assessing penalties under the Commercial Fertilizer Law and Rules. The results of the hearing are under appeal by industry at the present time.

The Feed Section's activities were affected by a recurrence of the aflatoxin problem beginning in the summer of 1980. Aflatoxin was found to contaminate many corn and peanut products and action had to be taken to make the feed industry and consumers aware of the problem. Many complaints were based on corn containing aflatoxin. Dairy and swine operations seemed to be those primarily affected.

Feed tonnage remained slightly over two million tons, and samples continued to total over seven thousand annually. Directed inspections were conducted on thirty-two of the feed mill establishments in Florida under a contract with the Federal Food and Drug Administration. Some changes in sampling were instituted through the help of computer data to better represent the feed being distributed in Florida and also to place more emphasis on problem products helping our work to become more meaningful and efficient.

Certified seed work in the last decade has been dominated by certification of peanuts. However, soybean acreage for certification has remained at significant levels for the last three years and may increase in the future. Small grain production was over one thousand acres for the first time in recent memory.

DIVISION OF MARKETING

John D. Stiles served in the U. S. Marine Corps during World War II for three years and was employed as director, Division of Marketing, for the West Virginia Department of Agriculture before joining the Florida Department of Agriculture in March of 1962, as chief of the State Marketing Bureau Section of the Division of Marketing. He became assistant director in 1964, and director in 1966. Born in West Virginia on September 4, 1924, he was graduated from the public schools there and received a bachelor's degree in agriculture from West Virginia University in 1950.



The marketing of Florida agricultural products begins when the farmer decides to sell his goods and ends when consumed by the ultimate purchaser. There are many steps in between. It is the responsibility of the Division of Marketing to provide professional assistance through all phases of the marketing process be it packaging or promotion, transportation or seeking new consumers for Florida products.

Since the majority of our agricultural goods are highly perishable, timing is crucial. Division activities are geared toward the seasonality of individual products to maximize the assistance to the producer and ultimately the consumer. All Florida agricultural commodities are promoted by the division with the exception of citrus. Timely market news is provided by telephone-recorders and written reports to inform the producer and purchaser of current trends and prices. State Farmer's Markets are strategically located in key production areas. Statistical crop estimates are formulated to provide harvest predictions. Licenses are issued to bonded agricultural product dealers to protect both the producer and the consumer. Florida products are promoted not only in the United States but throughout the free world.

The 1980 cash receipts from marketing Florida agricultural products totaled \$3.8 billion, down slightly from last year's record of \$3.9 billion. Florida continues to rank number one among the Southeastern states in total farm cash receipts and number 11 nationwide. The value of exports grew by 6 percent from 1979 totalling \$516.9 million which is close to 14 percent of the total cash receipts. Promoting Florida agriculture on an international basis is a primary responsibility of the **Bureau of Technical Marketing Programs**. A prime outlet for marketing these products to foreign buyers is the trade show. The 11th Annual Florida International Agribusiness Trade Show, held in Tampa, proved to be the most successful one to date. There were more foreign visitors and a record

number of Florida agribusiness exhibits. The Southern United States Trade Association (SUSTA) held the Sixth Annual International Trade Show in New Orleans with Florida having more exhibitors than any other state with the exception of the home state of Louisiana. There were a total of 140 exhibition booths and over 200 buyers representing 50 countries. Two bureau members attended the AGROEXPO 81 in Bogota, Colombia. Many solid trade leads were developed. The attendance there exceeded 600,000.

The bureau also initiated a statewide program designed to assist small farmers in selling their produce direct to the consumer. The supervision and administration of the active Marketing Orders covering peanuts, soybeans and tobacco are responsibilities of this bureau as is the administration of the Florida Bred Quarter Horse Program. Requests are frequently received for economic feasibility studies on varied subjects from throughout the state. Information is compiled and assistance is provided by bureau personnel.

The January freeze did substantial damage to Florida's fresh fruit and vegetable industry. Nonetheless, fresh Florida crops sold through the **Bureau of State Markets** reached an all time high this year with a total monetary volume of \$208,167,463.62 compared to approximately \$193 million last year. There were 21,412,110 bushels of fresh produce sold through the state market system. Market sites are continuing to expand and modernize to facilitate the growing number of Florida agricultural producers who buy and sell through the State Farmer's Markets. This bureau provides a vital and convenient marketing outlet for farmers throughout the state.

On January 13 and 14, the dates of the devastating freeze, the **Bureau of Crop and Livestock Reporting Service** went in to the fields to begin evaluation of crop damage. They began by checking the ice levels in the citrus fruit and 16 days later issued an extent of damage report which was most

accurate. On January 1, the official orange forecast was 203 million boxes. The after-freeze forecast was reduced to 173 million boxes of Florida oranges. The actual harvest was 172.4 million boxes ... very close to the bureau's estimate. During this time of anxiety it was this bureau's responsibility to keep the producer and the consumer informed as to actual crop damage as a result of the freeze. The bureau is also gearing up for next year's biennial citrus tree census where 14,000 square miles of Florida citrus growing areas are photographed aerially to determine citrus acreage and estimated tree count. There are now about 850,000 acres of commercial citrus growing in the state. The bureau also issues forecasts and summaries on the acreage and volume of all livestock, poultry, flowers and foliage, various vegetable crops, field crops and avocados and limes. In addition, the bureau issues reports on weekly weather and crop news, annual farm cash receipts, and quarterly farm labor and wage reports.

The **Bureau of Market News** records the daily transactions in the Florida agricultural marketplace on fruits and vegetables, livestock, poultry and eggs and ornamentals. This year the Fruit and Vegetable section worked with the University of Florida to develop a report for tabulation of the various foliage plants distributed outside of the state to determine destinations and the potential for developing new markets for Florida foliage. Market news reporters were also in the fields immediately following the freeze to estimate initial damage to the fruit and vegetable crops as well as foliage and fern crops. The livestock Market News office is preparing to assume the responsibility of preparing a comprehensive feeder cattle report that will encompass activity throughout the Southeast. This section is also preparing to issue a new report incorporating Florida grain, feed and hogs information. The Egg and Poultry section began preparation for an all Florida poultry report that will cover marketing activity in the three major poultry marketing areas. The mailing list for the **Florida Market Bulletin** was purged in 1981. After the purge there were close to 47,000 subscribers to the publication, a reduction of 10,172 as a result of circularization.

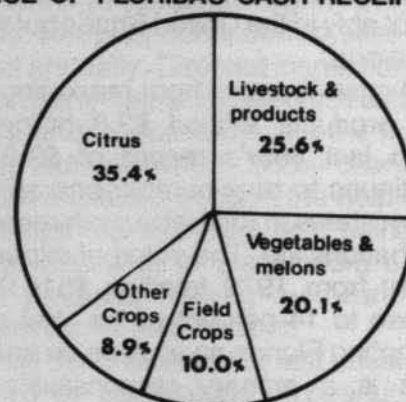
The function of the **Bureau of Market Development** is to develop successful promotional campaigns and supportive material to increase the use of Florida agricultural products. Many promotional tools are used in this effort. The bureau has developed a good working rapport with industry representatives. They work together in many

promotional projects. A promotion for Hastings potatoes was implemented for the third consecutive year. A study on the national marketing of Florida grapes was also initiated by the bureau. The bureau conducted four successful Harvest Festival dinners in Toronto, New York, Chicago and St. Louis. These dinners, in conjunction with tours of grocery and produce markets, give the bureau personnel and industry people an excellent opportunity to meet with northern buyers of Florida commodities.

The bureau continued their promotion of Florida products through recipe development and cooking demonstrations. The Mini-Menu series continued to be an excellent source of promotion of Florida goods. Properties were located by bureau personnel for the statewide gleaning program and the pilot community gardening program. Efforts were made to promote good dietary habits to children through a food poster distribution program to the schools. Appearances were also made on the syndicated television program *Romper Room* to promote the wholesomeness and nutrition of fresh fruits and vegetables to children.

During the 1980-81 fiscal year, the **Bureau of License and Bond** issued 2,615 licenses under the state law. Bureau field representatives made 7,196 field contacts and through the efforts of the bureau, \$256,021.99 was recovered for Florida producers. The nursery industry in the state has demonstrated a mixed reaction to the exemption of tropical foliage from the License and Bond law. This exemption came into effect in 1979.

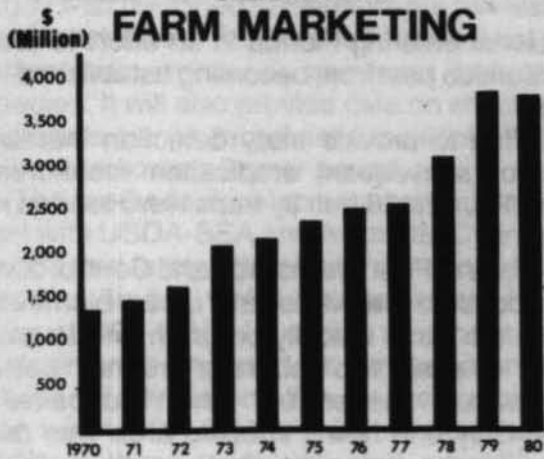
SOURCE OF FLORIDA'S CASH RECEIPTS, 1980



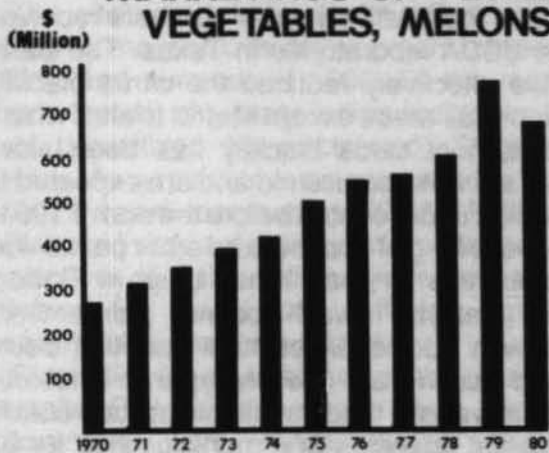
TOTAL \$3,746,000,000

This chart demonstrates the responsibilities of the Division of Marketing to provide professional services to all commodity groups in moving their products from the time they are harvested until they reach the consumer.

FLORIDA FARM MARKETING

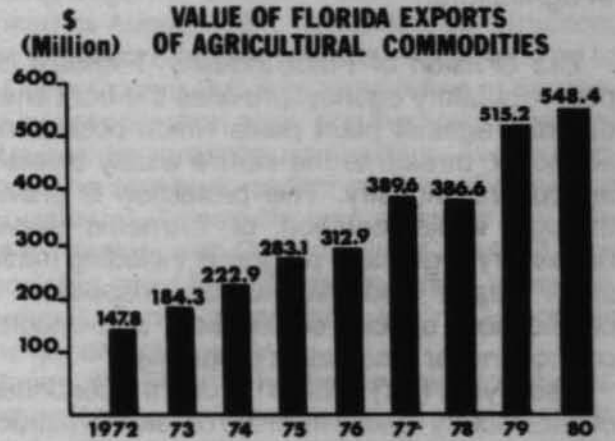


MARKETINGS OF FLORIDA VEGETABLES, MELONS



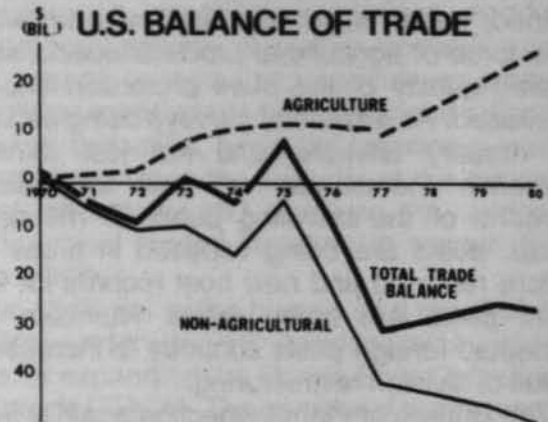
Over 200,000 carlot equivalents of fresh fruits and vegetables now leave the state during a regular marketing season.

VALUE OF FLORIDA EXPORTS OF AGRICULTURAL COMMODITIES



The export market is important to Florida's agriculture and the State's economy.

U.S. BALANCE OF TRADE



Agricultural exports improve the nation's trade balance.

DIVISION OF PLANT INDUSTRY

Halwin L. Jones was employed in 1949 as an inspector with the State Plant Board, which became the Division of Plant Industry in 1961 under government reorganization. He was assistant plant commissioner and assistant director from 1951 until November, 1964, when he became director. Mr. Jones was born March 7, 1924, in Crescent City, Florida, and was graduated from the University of Florida in 1949 with a bachelor's degree in agriculture and in 1952 with a master's degree in agriculture.



The Division of Plant Industry, Florida's plant pest regulatory agency, provides the front lines of defense against plant pests which pose serious economic threats to the state's widely diversified agricultural industry. This protection is provided through implementation of biometric surveys, necessary regulatory programs including nursery, stock dealer and non-nursery inspection and certification, special certification, and integrated control and/or eradication programs.

Fiscal year (FY) 1980-81 brought a continuation of satisfactory results from the division's restructuring program launched in 1978-79. The entire state has benefited from this innovative design for achieving the best plant protection for the least cost in time and dollars. Due to a better qualified, better trained, better supervised and more knowledgeable force of agricultural products specialists, the overall quality of the plant protection effort has increased. As a result of surveys being conducted on nursery environs and not just within the nurseries themselves, as well as residential gardens of the traveling public in metropolitan areas, pests are being exposed in areas never before reported and new host records for known plant pests are being made. Numbers of intercepted foreign pests continue to increase as a result of division restructuring.

The Bureau of Plant Inspection again proved its ability during the FY to respond when plant pests are introduced into the state. For example, due to an apparent breakdown in California's inspection system, brown garden snail, *Helix aspersa*, a destructive, multi-host plant feeder not found in Florida, was intercepted with alarming frequency on certified plant, cut-flower and cut foliage shipments from that state. Brown garden snail interceptions were made from 30 California shipments of certified material, six noncertified shipments which arrived via air transport, and from six noncertified homeowner shipments. It became necessary to inspect 100 percent of California's shipments of

plant material entering Florida in an effort to prevent this serious pest from becoming established in the state.

In an effort to provide early detection thereby allowing for subsequent eradication measures, during the FY, 12,126 fruit fly traps were tended in the state.

The Bureau of Pest Eradication and Control continues to conduct statewide and urban biometric surveys in the citrus blackfly program and to produce and release two laboratory-reared parasitoids, *Amitus hesperidum* and *Prospaltella opulenta*. Only one newly infested area was detected outside the generally infested area in 1980. More than 400,000 parasites from the division's Ft. Lauderdale facility have been released to date, exclusive of the relatively small numbers received from the USDA laboratories in Texas. The parasites have effectively reduced the citrus blackfly population in all areas except Merritt Island, where the reduction of citrus blackfly has been slow. Parasites are well established and are expected to bring the pest under control before the end of 1981.

Lethal yellowing of coconut and other palms was less serious this FY than it has been in Florida. Resistant Malayan dwarf coconut palms were plentiful, with additional resistant varieties being developed such as the Maypan. Antibiotic tetracycline was still made available at state cost to governmental agencies and municipalities for injection of LY-susceptible palms.

The spreading decline (burrowing nematode) program continued to hold steady in grower interest and has tended to increase slightly each year. Just under 900,000 feet of buffer were being maintained as of June 1981. Improved weed control in the buffers has been obtained with a herbicide containing diuron plus bromacil, in contrast with the use of diuron only. The push and treat phase of the program continued at the same level of grower interest. Fee increase notices (23 percent increase) were mailed with the increase be-

coming effective July 1, 1981. This was the first fee increase since 1975.

The chief of the pest eradication and control bureau, Charles Poucher, made several trips to California to confer, advise and monitor that state's Mediterranean fruit fly eradication campaign. California's eradication program has been less than successful and the infestation continues to spread.

The Bureau of Methods Development began a cooperative effort with IFAS during the FY. This study was designed to measure the reinfestation of land treated with Amdro and Mirex fire ant baits by *Solenopsis invicta*, *S. geminata* and other ant species. It will also provide data on effects of those materials on non-target ant populations. This study will extend over a 2-year period.

The methods development bureau, in cooperation with USDA-SEA and American Cyanamid Inc., conducted tests with the new American Cyanamid product Amdro, which was registered for use on August 20, 1980. In addition to these tests, an experimental imported fire ant bait manufactured by the Eli Lilly Corporation was tested in cooperation with USDA-SEA and Eli Lilly Corporation. Results of these tests indicated over 90 percent reduction in established fire ant mounds for both products.

The witchweed research plot at Bartow was continued by the methods development bureau during spring and summer of 1980. Of the many crop plants tested, only hairy indigo *Indigofera hirsuta*, was parasitized by witchweed, *Striga gesnerioides*. As a result of tests conducted in 1979 and 1980, it was determined by USDA-APHIS and the DPI that no crops of economic importance, with the exception of hairy indigo, were parasitized by witchweed. Regulatory efforts against *S. gesnerioides* were terminated.

Properties where releases of the citrus whitefly parasite *Encarsia lahorensis* (syn. *Prospaltella lahorensis*) were made during 1979 were monitored during the summer of 1980. Results indicated a much more rapid spread of this beneficial insect than was expected, and good control of the citrus whitefly was contained in many cases.

During the FY, 311 samples of ants were submitted for identification to the methods development bureau entomologist through regular channels. These samples involved approximately 17,500 specimens.

The fumigation of citrus at the Doyle Conner Building in Gainesville was reduced considerably from previous years due to the freeze on January 20, 1981. A total of 790,486 (4/5 bushel) boxes of

fruit and 36,134 gift boxes of fruit were fumigated at the Doyle Conner Building, or 731 truckloads. In addition, 6,492,888 boxes of fruit were fumigated by the Division of Fruit and Vegetable Inspection at Ft. Pierce and Wahneta. The Environmental Protection Agency continues to examine the use of ethylene dibromide (EDB) for fruit fumigation. An advisory panel recommended more study on the issue during a meeting held March 30, 1981.

Construction of the addition to the Doyle Conner Building began in October 1980, with completion planned for August 1981. To facilitate construction, three legislature-funded projects — the addition to the Doyle Conner Building, remodeling of the present insect collection area, and the new laboratory and quarantine greenhouse facilities — were combined. The architectural firm of Craig Salley and Associates of Gainesville was awarded the contract for design, with Codwallader, Campbell, and Associates providing the engineering expertise. Charles R. Perry Construction, Inc. of Gainesville is the general contractor.

During the FY, the heating system for the arboretum located in Winter Haven was installed. Mr. Leon Hebb was instrumental in designing, installing and supervising installation of this heating system.

The Bureau of Entomology continues to provide arthropod identification services, conducts limited investigations of certain economic problems, assists in instructing agricultural products specialists, continues to build a general arthropod reference collection, conducts taxonomic investigations, supervises the security of the biological control laboratory, and develops the taxonomic and biological control literature to support these responsibilities.

New additions to the bureau as a result of construction underway will provide much needed space for expanding the Florida State Collection of Arthropods (FSCA). The number of specimens added to the FSCA during the FY was: 24,157 pinned and labeled specimens; 4,973 slide-mounted specimens; 10,968 vials; 625 quarts; and 461 papered specimens. Over 1,000 fossil amber specimens were recorded in the registry during the FY. The combined identifications totaled 245,389.

The Bureau of Nematology processed more than 14,000 samples for nematode assay during the FY. Most of these were processed to fulfill the plant certification requirements of other states. Botanical services provided more than 2,900 plant identifications this FY, and additional specific information was furnished upon request.

The nematology bureau evaluates nematodes of regulatory significance, making recommendations for handling these nematodes on an individual basis. Pathogenicity studies are conducted to evaluate the damage caused by nematode pests of economic plants in Florida. Results of these studies also provide a basis for evaluating various nematodes found in association with crop plants.

The bureau's activities included: evaluating the importance of the coffee lesion nematode, *Pratylenchus coffeae*, especially on citrus and ornamentals; evaluation of root-knot nematodes, *Meloidogyne* spp., on selected foliage and woody ornamentals during production and post-harvest periods; determining the distribution of the pinewood nematode, *Bursaphelenchus lignicolus*; and evaluating other important nematode pests. The nematology bureau was involved also in developing a plan for the implementation of an early pest detection survey for a restructured field force, and in assisting growers by evaluating the economic and regulatory significance of plant parasitic nematodes associated with crop decline.

The Bureau of Plant Pathology processed 7,551 specimens during the FY, with 62 new reports. Thirty-four new fungal and six new bacterial cultures were added to the Florida Type Culture Collection and Bacterial Collection during the FY, bringing the total to 1,007 fungal and 218 bacterial cultures in the collections. The variety of plant diseases and viruses being identified from samples has broadened, and the workload continues to increase as a result of division restructuring.

Projects during the FY by the pathology bureau included: the conclusion of the milkweed vine, *Morrenia odorata*, project, following extensive investigations into the use of *Phytophthora palmivora*, a root pathogen of milkweed vine, as a possible biological control against the noxious weed in citrus; citrus canker studies and detection training for field personnel; seedling root rot in the citrus nursery investigations; and investigations into *Dichotomophthora* blight of Christmas cactus.

Construction was completed on an addition to the plant disease and quarantine facility. Quarantine space was doubled and much needed laboratory space was added. The laboratory provides room for a tissue culture facility and additional space for virus detection. New greenhouse space allows greater control over environmental conditions required for virus indexing. Two introductions are being indexed, Ray Ruby and Venezuelan Red Navel.

Forest tree nursery problems continue to receive priority attention through a cooperative program

between Divisions of Forestry and Plant Industry.

The Bureau of Citrus Budwood Registration reported 21 new participants in the budwood program this FY. Budwood personnel supervised the planting of 11 new scion groves representing 3,620 trees.

Many record low temperatures occurred throughout the Central and Northern citrus belt for two nights during January. Heavy limb and trunk damage occurred to trees in many locations. Low temperatures of 20 degrees F. or below for periods ranging up to 5 hours occurred at the division's Citrus Budwood Grove near Dundee.

Valuable budwood source trees in the foundation grove and arboretum were carefully protected from the freezing weather. This action contributed to the preservation of budwood which subsequently furnished a record 1.36 million budeyes to the industry this FY. An additional 3.5 million registered buds were cut from scion groves for propagation by program participants and other using virus-tested propagation material. Budwood bureau personnel supervised the cutting of 76 percent of this budwood.

Nearly 3 million registered nursery tree propagations were reported this FY, illustrating the rapid increases in nursery stock production following severe industry losses due to freezing weather.

Records were also set during the FY for dry weather, requiring dramatic increases in irrigation requirements in the foundation grove and test nurseries.

Exocortis testing continued to be the most important virus test conducted during the FY. Over 1,690 tests were begun and 1,874 determinations were completed. Tristeza indexing continued to be concentrated primarily in the foundation grove, where over 1,400 tests were completed.

Several changes were made in the arboretum this FY. Several kumquat selections were removed because of decline due to bud union incompatibilities, and 23 new trees were added. Brick walkways were installed in the reception area, and specimen plants were established in urns. Over 115 people visited the arboretum this FY.

The budwood bureau began work during 1976 to eliminate viruses from many excellent citrus budlines through shoot-tip grafting. As a result of this work, 34,780 budeyes were distributed to growers this FY from these new sources.

Revenue returned to the general fund from budwood bureau activities was \$89,913 during this FY, an amount which sufficiently covered all expense and operating capital outlay funds for the bureau for that time period.

Training in budwood procedures, virus disease recognition, variety identification and horticultural evaluation was given to 19 new employees in a total of four training classes lasting two days each.

The Bureau of Apiary Inspection issued 490 permits during the FY for 151,133 colonies of out-of-state bees to move into Florida, and 113 special moving permits for moving point-to-point within the state. Florida beekeepers were issued 1,023 moving permits and 61 certificates of inspection. Apiary inspectors examined 325,038 colonies in 5,529 apiaries and found 903 colonies infected with American foulbrood. Florida's bee disease rate this FY was approximately 0.3 percent — one of the lowest in the nation. The sum of \$20,830 was paid during the FY to Florida beekeepers in compensation for bees and equipment destroyed because of American foulbrood.

Monthly reports from the state road guard stations during the FY indicated 124,869 colonies and 152,247 supers moved into Florida from other states. Road guard reports also showed 168,317 colonies and 147,433 supers left Florida for destinations across the nation.

DIVISION OF STANDARDS

Sydney D. Andrews was born in Tallahassee on July 23, 1915. He attended Florida State University and Biarritz University in France. During World War II he served in Europe with the U. S. Corps of Engineers. In 1933 he joined the department as a laboratory assistant, was later promoted to assistant oil analyst, and then to chief of the Petroleum Inspection Section. In 1963 he was made assistant director of the division and then director in 1968. He is past chairman of the National Conference on Weights and Measures, past chairman of the Committee on Petroleum Products and Lubricants for the American Society for Testing and Materials and currently serves as Chairman of the Board for the Society. In 1978, he was appointed by President Carter to serve a six year term on the United States Metric Board



The Division of Standards is responsible for administering Florida's gasoline inspection, anti-substitution, brake fluid, antifreeze and weights and measures' laws. This work is carried out through a coordinated program of field and laboratory testing.

The division headquarters and main laboratory are located in Tallahassee. In the field, division inspectors conduct a variety of tests on all kinds of commercial weighing and measuring devices and draw fuel samples for quality analysis in the laboratory. Specialized equipment such as mobile laboratories and large scale test units equipped with up to 40,000 pounds of test weights add to the completeness of the program. A branch laboratory having the latest fuel testing and weights and measures calibrating equipment is located in Port Everglades, serving the needs of consumers in South Florida.

In recent years, technology has brought about rapid changes in the kinds of weighing and measuring devices used in the market place. Mechanically operated gasoline pumps, scales and other instruments are being replaced by more sophisticated electronic equipment that gives faster service and, in many cases, improved measurement accuracy for the consumer. Fuels and other products regulated by the division are undergoing constant changes to meet the demands of modern engines and equipment.

With these advances, the division regularly updates Florida's standards and test procedures to be certain consumers and the industry are afforded the best protection available.

Bureau of Petroleum Inspection

In the division's Bureau of Petroleum Inspection, the testing of petroleum products, brake fluid and

antifreeze from both a quality and quantity standpoint safeguards both consumers and the industry. Gasoline is checked for antiknock rating, volatility, sulfur, lead and to be certain it has not been contaminated with water, foreign matter or other kinds of fuel. The quality of diesel and heating fuels is also tested to be certain safety and performance standards are met.

Gasohol, a mixture of 90 percent gasoline and 10 percent anhydrous ethanol has become a familiar word to Florida motorists. Gasohol must be registered with the department prior to sale and it is the bureau's job to see that gasohol, like any other fuel, meets standards that assure good performance.

Brake fluid and antifreeze/coolants are important parts of the vehicle braking and cooling systems, respectively. Reliability and performance are assured through a mandatory registration-quality inspection program.

Petroleum inspectors make more than 170,000 annual tests on gasoline pumps, vehicle tanks and other kinds of petroleum meters at wholesale and retail outlets. Those found inaccurate or incorrect are either condemned or placed under correction order.

In addition to its regular inspection activities, the bureau investigates complaints made by consumers who suspect that they have received inferior quality or short measure at the gasoline pump. After each investigation, a bureau representative makes personal contact with the complainant to review his findings. It is worthy of mention that, although there is increased public awareness about the behaviour and quality of fuels, there have been no significant increases in the number of fuel quality or petroleum measurement violations over the past several years.

Bureau of Weights and Measures

The Bureau of Weights and Measures inspects and tests weighing and measuring devices throughout the state to assure fair and accurate transactions in the market place.

Bureau laboratories house the State's Primary Standards which are directly traceable to national standards in Washington, D. C. From the laboratory, state weights and measures inspectors and other regulatory personnel receive calibrated standards and equipment to field test all commercial weighing and measuring devices used in Florida.

Each year the bureau performs more than 85,000 inspections, tests and calibrations of all kinds of scales, taximeters, odometers, linear and fabric-measuring devices, grain moisture meters and packaged goods.

In 1979, the bureau added an additional mobile weight test unit to its vehicle scale inspection program. The new unit is a departure from the traditional design and will handle up to 40,000 pounds of calibrated test weights. A program is currently under way to provide increased weight handling capabilities to all mobile equipment, thereby enabling more efficient testing of modern day scales.

Recognizing the importance of owner and user appreciation for weighing and measuring devices, the bureau encourages and sponsors self-maintenance programs. Its laboratories certify weights and other measurement standards for authorized scale mechanics and the industry. It cooperates with county and municipal governments in developing programs at the local level, giving weights and measures the broadest possible coverage. When called on, the bureau also gives technical support and assistance to other law enforcement agencies conducting investigations that involve weighing or measurement.

The bureau is equipped with metric measurement standards and expertise in metrics so that it can assure fair and accurate transactions for consumers and merchants using devices that measure in metric units.